

REMARKS

Claims 1-52 are pending in the application. Following entry of this claim listing above, claims 1-66 will be pending in the application. Claims 1-52 stand rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. Claims 1-52 stand rejected in the Office Action at hand under 35 U.S.C. 102(b) as being anticipated by Fujimoto et al. (Skew-Free Parallel Optical Transmission Systems, IEEE, pages 1822-1831, October 1998) (hereinafter "Fujimoto"). Claims 1, 6, 16, 17, 29, 36-38, 45, 50 and 52 are being amended. Claims 53-66 are being added. No new matter is being introduced by way of the amendments or new claims.

Responding first to the rejection under 35 U.S.C. 112, first paragraph, independent claim 1 is amended in the Claim Listing above to remove the phrase "having an aggregate data rate equivalent to the data rate of the SONET/SDH frames." Independent claims 6, 16, 17, 29 and 38 as amended have similar limitations removed. Therefore, Applicants respectfully submit that the rejection of claims 1-52 under 35 U.S.C. 112, paragraph 1 is now moot and respectfully request the rejection be withdrawn with regard to the independent claims and, in turn, the dependent claims.

Responding next to the rejection under 35 U.S.C. 102(b), Applicants' invention as recited in the preamble of Claim 1 is directed to a system for transferring synchronous optical network/synchronous digital hierarchy (SONET/SDH) frames between two nodes. Claim 1 as amended recites,

... a first de-skewing processor to overwrite a frame marker on the SONET/SDH frames with a unique frame maker to aid in de-skewing the plurality of data channels; a second de-skewing processor to de-skew the data from the plurality of data channels based on the unique frame marker and to restore the frame marker on the SONET/SDH frames ...

Overwriting and restoring frame markers are disclosed in the specification as originally filed at page 7, lines 20-23; page 8, lines 1-10; page 12, lines 8-10; and claims 22-24.

In contrast, on pages 1823 and 1824, Fujimoto discloses adding a data channel in both a group-multiplexing embodiment (Fig. 4) and non-multiplexing embodiment (Fig. 6) of an optical transmission system. Referring to the group-multiplexing embodiment of Fig. 4 and page 1823, right column, first paragraph, a new channel (i.e., 20th channel in Fig. 4) is added and filled with auxiliary data, “A bits,” and the A bits are multiplexed into 19 data channels so that five multiplexed output data streams each contain an A bit. Referring to the non-multiplexing embodiment of Fig. 6 as described on page 1824, left column, a new sequence (i.e., channel) is added to the parallel data sequences to allow for some data pulses in each sequence to be moved to the new sequence to create a vacant time slot for the frame pulses, thereby allowing the bit rate of the data sequence to remain the same for high line speed systems (> 1Gbit/s). In this way, both the group-multiplexing embodiment of Fujimoto Fig. 4 and non-multiplexing embodiment of Fujimoto Fig. 6 adds an extra channel.

Fujimoto does not, however, overwrite a frame marker on a SONET/SDH frame to aid in de-skewing data channels, as Applicants’ now amended claim 1 does. Therefore, Applicants respectfully submit that Fujimoto does not anticipate Applicants’ claim 1 as now amended (“a first de-skewing processor to overwrite a frame marker on the SONET/SDH frames with a unique frame marker . . . ; a second de-skewing processor to de-skew the data . . . based on the unique frame marker and to restore the frame marker on the SONET/SDH frames”).

Accordingly, Applicants respectfully submit that amended claim 1 should now be allowable over Fujimoto under 35 U.S.C. 102(b).

Independent claims 6, 16, 17, 29, and 38 are being amended to include similar limitations and, therefore, should now also be allowable over Fujimoto under 35 U.S.C. 102(b).

For at least the same reasons, dependent claims 2-15, 18-28, 30-37, and 40-52 should also be allowable over Fujimoto under 35 U.S.C. 102(b). New dependent claims 53 and 54 should also be allowed for at least the same reasons as base claim 38.

New independent claims 55 and 60 relate to mapping and de-skewing data without increasing a given number of bits of a data channel. Support for these new claims can be found at least at page 4, lines 1-6; page 8, lines 1-10 in the specification as originally filed. In contrast, Fujimoto increases the number of bits on a data channel by adding “A bits” (as described above).

Therefore, independent claims 55 and 60 should also be allowable over Fujimoto under 35 U.S.C. 102(b).

For at least the same reasons, dependent claims 56-59 and 61-66 should also be allowable over Fujimoto under 35 U.S.C. 102(b).

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims pending after entry of the Claim Listing above (Claims 1-66) are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

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